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<div>34610 7590 02/05/2008</div> <div>KED & ASSOCIATES, LLP</div> <div>P.O. Box 221200</div> <div>Chantilly, VA 20153-1200</div>				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/539,762

Applicant(s)

CHOI, EUN-JEONG

Examiner

Ann J. Chempakaseril

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 30-58 are pending in the action.

Response to Amendment

2. Claims 30-32, 34-38m 40m 42-45, 47-51, 53, and 55-58 are amended and claims 59-61 are added.

Response to Arguments

3. Applicant's arguments with respect to claims 30-61 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 36 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 36, it is indefinite if "the defined start tag" corresponds to "a defined start tag in claim 36 or the one in claim 35. Also, in claim 35, if there was not a defined start tag in the first place, how will there be a corresponding end tag? Examiner assumes for the purposes of examination, has interpreted claim 36, as just reading a new token.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 32-34, 39, 41-44, 46-49, 50, 52-54, 57-58 are rejected under 35

U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication

2001/0056460 issued to Sahota et al. (hereinafter "Sahota").

As per claim 32, 43, 47 and 53, Sahota discloses the syntax parser comprises:
an XML verifier that verifies whether a corresponding document is composed suitable for each DTD on the basis of the token generated by the word parser (HTML converter 208 converts existing HTML type content into clean well-formed documents (XHTML) for conversion into XML service specific schemas and data files. An XML schema offers an XML centric means to constrain XML documents. [0059] ML files or documents that are created can be used by content harvest and conversion platform 130 and syndication server 110 and can be defined for specific types of applications and audiences using document type definitions (DTDs) [0136; Sahota]);

and a terminal GUI-based object generator that matches the analyzed markup and a GUI of the terminal (By generating a standardized data stream from the capture templates, content can be displayed on multiple types of platforms [0025]).

As per claim 33, Sahota discloses the parsing system integrally parses a web-document composed on the basis of any one of SGML and XML related to HTML, XHTML, mHTML, cHTML, WML and HDML (Parsing a web-document composed of XML related to HTML [0026], WML [0006], XHTML [0059])

As per claim 34, Sahota discloses the parsing system can be applied to any handheld terminal and select a kind of an element to be parsed according to specification of each of the terminals (The parsing system can be applied to multiple platforms or formats such as, for example, HTML, portable document format (PDR), Postscript, or other like formats and architectures such as, for example, a personal computer or an electronic portable device. [0034])

As per claim 39, Sahota discloses the token table comprises: tokens defined in an XML document (HTML converter 208 creates XML data files 208a based on the conversion rules in the repository and creates XML data files and streams;

keywords defined in DTD for all documents provided to the handheld terminal (Creates XML data files and streams that are used by content converter 204 and content generator 203 subsystems);

a list of elements which can be supported by each terminal (create dynamically content for specific platforms and device frameworks. [0059])

As per claim 41, 46, and 52, Sahota discloses the word parser comprises a token generator and an XML well-formedness verifier, receives the supplied document character by character, recognizes a token of the document on the basis of the token table, and extracts the token by using the token generator and the XML well-

formedness verifier (HTML converter 208 converts existing HTML type content into clean well-formed documents (XHTML) for conversion into XML service specific schemas and data files. An XML schema offers an XML centric means to constrain XML documents. The conversion logic and process is stored in a content acquisition and conversion rules repository 207a. HTML converter 208 creates XML data files 208a based on the conversion rules in the repository and creates XML data files and streams that are used by content converter 204 and content generator 203 subsystems to create dynamically content for specific platforms and device frameworks. [0059])

As per claim 42, Sahota discloses the contents model means a hierarchy of elements and an attribute list, and is defined in DTD for all documents provided to the handheld terminal. (DTD establishes a set of constraints for an XML file or document. That is, a DTD defines the way an XML document should be constructed. [0136] A hierarchy of elements and attribute list is defined depending on the type of DD; see Table 2.)

As per claim 44, 50, and 54, Sahota discloses parsing web-document based on elements, comprising: a token table comprising tokens defined in an XML document, keywords defined in document type definition (DTD) for documents provided to a handheld terminal, and a list of elements, which can be supported by each terminal (HTML converter 208 creates XML data files 208a based on the conversion rules in the repository and creates XML data files and streams that are used by content converter 204 and content generator 203 subsystems to create dynamically content for specific platforms and device frameworks. [0059];

a word parser for extracting and separating tokens of the web-document supplied to the terminal regardless of kind of a markup language used to compose the web-document by referring to the token table (HTML parser engine 217 can parse an HTML web page from Internet content and web sites 213 on the basis of markup and non-markup such as selected tags, styles, and content are either replaced or removed from the HTML page [0065]);

a contents model determined by DTDs for the documents provided to the terminal that includes a hierarchy of elements and an attribute list (DTD establishes a set of constraints for an XML file or document. That is, a DTD defines the way an XML document should be constructed. [0136] A hierarchy of elements and attribute list is defined depending on the type of DD; see Table 2.);

a syntax parser for parsing syntax for the tokens extracted and separated by the word parser on the basis of the contents model, and generating an object on the basis of GUI of the terminal through the parsed syntax (XML files or documents that are created can be used by content harvest and conversion platform 130 and syndication server 110 and can be defined for specific types of applications and audiences using document type definitions (DTDs). DTD defines the way an XML document should be constructed and generating a tree –based object [0095] on the basis of graphic user interface (GUI) of the terminal [Figure 9b])

As per claims 48, 49, 57, and 58, Sahota discloses,

an integral parser that parses a web-document composed of a predetermined markup language supplied from a web-server (HTML parser engine 217 can parse an

HTML web page from Internet content and web sites 213. In one embodiment, selected tags, styles, and content are either replaced or removed from the HTML page. Such a modification can be displayed in a browser to see the changes. [0065]);

a memory that stores information parsed by the integral parser (Furthermore, the following embodiments describe simple to use application tools for acquiring content and for creating templates to transform the content. The templates can be stored in a file or a database for later, which allows content to be edited such that other types of content can be added to provide new "look and feel" content. [0027]); and

an application program using information extracted from the integral parser, wherein the integral parser includes a word parser that extracts and separates tokens of the web-document supplied to the terminal regardless of a kind of a markup language used to compose the web-document by referring to the token table, and wherein the word parser includes an attribute parser configured to recognize at least one of a name of an attribute or a value of the attribute (Content Converter 204 is responsible for transforming, e.g., XML data files 208a or other type of media, to new formats using templates, content, and media 209a. [0053]; The "@<attribute name>" function, e.g., @SRC - Starting from the first , retrieves the value for SRC , =http://image.weather.com/pics/blank.gif. The "All" function, starting from the first , retrieves one long string containing all elements, attributes and text, as shown below. [0133])

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

As per claims 30 and 38, Sahota discloses parsing a web-document based on elements, which is provided to an application of a handheld terminal when the system calls the web-document to provide it to the handheld terminal (HTML parser engine 217 can parse an HTML web page from Internet content and web sites 213 [0065] based on elements [0104] which is provided as a template to for a mobile device such as a wireless telephone or personal data assistant (PDA) [0040] when access to a web page is requested [0044]), comprising:

a word parser that separates a token on the basis of markup and non-markup by referring to a token table for all markup data necessary for kind of a document to be supported, (HTML parser engine 217 can parse an HTML web page from Internet content and web sites 213 on the basis of markup and non-markup such as selected tags, styles, and content are either replaced or removed from the HTML page [0065]),

Sahota does not explicitly disclose wherein a same string of the web-document provided to the terminal has a different token according to whether it is a markup or a non-markup;

Although, it is well known to one to ordinary skilled in the art that a same string of the web document has a different token depending on whether it is a markup on a non-markup.

Where a claimed improvement on a device or apparatus is no more than "the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement," the claim is unpatentable under 35 U.S.C. 103(a). *Ex Parte Smith*, 83 USPQ.2d 1509, 1518-19 (BPAI, 2007) (citing *KSR v. Teleflex*, 127 S.Ct. 1727, 1740, 82 USPQ2d 1385, 1396 (2007)). Accordingly Applicant claims a combination that only unites old elements with no change in the respective functions of those old elements, and the combination of those elements yields predictable results; absent evidence that the modifications necessary to effect the combination of elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. 103(a). *Ex Parte Smith*, 83 USPQ.2d at 1518-19 (BPAI, 2007) (citing *KSR*, 127 S.Ct. at 1740, 82 USPQ2d at 1396. Accordingly, since the applicant[s] have submitted no persuasive evidence that the combination of the above elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. 103(a) because it is no more than the predictable use of prior art elements according to their established functions resulting in the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement.

Sahota teaches the claimed a syntax parser that parses a contents model on the basis of document type definition (DTD) of each document, parses each syntax on the

basis of the result of parsing the contents model, and generates a tree-based object on the basis of graphic user interface (GUI) of the terminal (XML files or documents that are created can be used by content harvest and conversion platform 130 and syndication server 110 and can be defined for specific types of applications and audiences using document type definitions (DTDs). DTD defines the way an XML document should be constructed and generating a tree –based object [0095] on the basis of graphic user interface (GUI) of the terminal [Figure 9b])

Claims 31, 40, 45, 51 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sahota as applied to claim 30 above, and further in view of Mackie et al. (US PGPub 2004/0054535; hereinafter "Mackie").

As per claims 31, 40, 45, 51, Sahota teaches the system of claim 30(HTML parser engine 217 can parse an HTML web page from Internet content and web sites 213 on the basis of markup and non-markup such as selected tags, styles, and content are either replaced or removed from the HTML page [0065])

Sahota does not explicitly teach, "a comment parser for processing a comment and a space; a markup start parser for recognizing a markup start tag and generating a token; an attribute parser for parsing an attribute and generating a token; and a parsed character data analyzer for analyzing parsed character data and generating a token" as claimed.

Mackie teaches the claimed a comment parser that processes a comment and a space (A predetermined parser rule such as the comment parser processes a word of structured text delimited by whitespace [0024-0025]);

a markup start parser that recognizes a markup start tag and generates a token (A token is generated when the markup starter parser recognizes a start label [0029]);

an attribute parser that parses an attribute and generates a token (an attribute parser that parses an attribute and generates a token [0042-0043]; see example [0045]);

and a parsed character data analyzer that analyzes parsed character data and generates a token, (parsing character data and generating a token [0045]).

Sahota and Mackie are analogous art because they relate to structured text processing.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system as taught by Sahota to use content parsers and generate a token based on the context as taught by Mackie in order to make a more precise decision regarding action to be taken on token. (Mackie, [Abstract]). Modification would allow an interpretation of the message elements of the corresponding structured text for a useful purpose. [Abstract]

Sahota teaches the claimed wherein the attribute parser is configured to recognize a name of an attribute or to recognize a value of an attribute (The "@<attribute name>" function, e.g., @SRC - Starting from the first , retrieves the value for SRC , =http://image.weather.com/pics/blank.gif. The "All" function, starting

from the first , retrieves one long string containing all elements, attributes and text, as shown below. [0133])

As per claim 59, Sahota teaches the claimed wherein the attribute parser includes a first attribute parser configured to recognize a name of an attribute and a second attribute parser configured to recognize a value of the attribute (The "@<attribute name>" function, e.g., @SRC - Starting from the first , retrieves the value for SRC, =http://image.weather.com/pics/blank.gif. The "All" function, starting from the first , retrieves one long string containing all elements, attributes and text, as shown below. [0133])

As per claim 60, Sahota does not explicitly teach, "if the value of the attribute is a keyword the first attribute parser recognizes the name and the value of the attribute at once without distinguishing the name from the value" as claimed.

Mackie teaches the claimed wherein if the value of the attribute is a keyword the first attribute parser recognizes the name and the value of the attribute at once without distinguishing the name from the value (. Header elements (e.g. SENT 706, DATE 708, SENDER 710, RECIPIENT 712, SUBJECT 714). The syntax of e-mail messages includes certain lines that may be reliably identified by their format; e.g., the set of lines prefixed by keywords such as "From" 716, "To:" 718, "Subject:" 720 combine to form the header of an e-mail message [0066])

Sahota and Mackie are analogous art because they relate to structured text processing.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system as taught by Sahota have syntax of e-mail messages include certain lines that may be reliably identified by their format; e.g., the set of lines prefixed by keywords such as "From" as taught by Mackie. Modification would allow an interpretation of the message elements of the corresponding structured text for a useful purpose. [Abstract]

Claims 35, 37, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sahota and Mackie, and further in view of Chadha et al. (US PGPub 2003/0184552; hereinafter "Chadha").

As per claims 35, 37 and 55, Sahota discloses parsing a called web-document of a web-server (An HTML web page is parsed. A user can access a particular web page on web server. The content from the web page is then parsed [0044]), the method comprising

reading a token from the web-document and parsing the token (reading a token from the webpage and parsed for tokens such as tags [0036]);

if the token is not a defined start tag or if the token is a comment or a space as result of the reading, ignoring the token, and when the defined start tag is read, parsing an attribute of an element from the token (A token is generated when the markup starter parser recognizes a start label. A predetermined parser rule such as the comment parser processes a word of structured text delimited by whitespace [0024-0025; Mackie]);

parsing the attribute of the element from the token, storing GUI-related information of the element, and parsing contents of the element (content harvest and conversion platform 130 can be used to extract pure data from the web page such as, for example, the HTML tags and attributes. [0041; Sahota]);

Chadha teaches the claimed as the result of the parsing, if the contents of the element are parsed character data, storing GUI-related information of the contents, and if the contents of the element are not the parsed character data, reading data until an end tag appears (The contents are parsed text data, storing GUI related information of the contents and reading data till there is no markup language tag to process [0035]);

In the case that the contents of the element are not the parsed character data, if the end tag corresponding to the defined start tag appears, terminating, and if the end tag corresponding to the defined start tag does not appear, ignoring and returning (If the tag is not a geometry-based tag (and therefore not a text-based, GUI-based or geometry-based tag), the tag is ignored at step 418 and the process is returned to 402 to get the next tag. [0035]).

Sahota, Mackie, and Chadha are analogous art because they relate to structured text processing.

It would have been obvious to one of ordinary skill in the art at the time of the invention having the teachings Sahota, Mackie, and Chadha to read parsed character data (paragraph [0035]) till the end tag appears. Modification would process the object entries of each of the object types to generate display data corresponding to the object entries.

As per claims 36 and 56, Sahota discloses wherein the parsing comprises the steps of:

if the read token does not include a defined start tag, reading the data continuously until the end tag appears, and if the end tag corresponding to the defined start tag does not appear, thereby ignoring the token (If the tag is not a geometry-based tag (and therefore not a text-based, GUI-based or geometry-based tag), the tag is ignored at step 418 and the process is returned to 402 to get the next tag. [0035]);

reading a new token (The process starts by parsing the next markup language tag in the markup file at step 402. A check is made to determine if there is a tag left at step 416. If there is a tag left, a check is made to determine if the tag is a text-based tag at step 404. The process ends when there is no markup language tag left to process. [0035])

Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sahota and further in view of Web Design Group (HTML comments)

As per claim 61, Sahota discloses wherein the different tokens are as follows:
<html> represents an element type, <p> html</p> represents parsed character data, <!--html--> represents a comment (Figure 9B shows the different tokens, such as element type, and parsed character data);

Sahota does not explicitly disclose the comment feature.

Web design group teaches the claimed `<!--html-->` represents a comment (A *comment declaration* starts with `<!`, followed by zero or more comments, followed by `>`. A *comment* starts and ends with `--`, and does not contain any occurrence of `--`.)

Web design group and Sahota are analogous art because they are in the same field of endeavor of representing the different tokens

It would have been obvious to use the feature taught by Web Design group and include it as a token for parsing. Modification provides the following simple rule to compose valid and accepted comments.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann J. Chempakaseril whose telephone number is 571-272-9767. The examiner can normally be reached on Monday through Thursday, 9-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Ann J Chempakaseril
Examiner
Art Unit 2166

February 2, 2008


SHAHID ALAM
PRIMARY EXAMINER